WHAT IS CLAIMED IS:

1. A glass fiber mat for use in a roofing composite, said mat comprising, by weight, about 68% to about 90% of fibers; about 10% to about 32% of an organic resin binder; and about 0.001% to about 20% of an adhesion modifier which induces fiber pull-out during tear of the composite and provides improved composite tear strength.

2. A glass fiber mat according to claim 1 wherein the amount of adhesion modifier is about 0.01% to about 10%.

3. A glass fiber mat according to claim 1 wherein the adhesion modifier is a polysiloxane.

4. A glass fiber mat according to claim 3 wherein said polysiloxane is a polyalkyl siloxane, a polyaryl siloxane, a polyalkylaryl siloxane or a polyether siloxane,or derivative thereof.

5. A glass fiber mat according to claim 4 wherein said polysiloxane is a polydimethyl siloxane or derivative thereof.

6. A glass fiber mat according to claim 4 wherein said polysiloxane has a molecular weight > 600.

7. A glass fiber mat according to claim 1 wherein said organic resin binder includes a urea-formaldehyde resin.

8. A glass fiber mat of claim 1 wherein said glass fibers have a length of about 3 mm to about 130 mm, and a diameter of about 5 micrometers to about 25 micrometers.

9. A roofing shingle comprising a glass fiber mat including, by weight, about 68% to about 90% of fibers, about 10% to about 32% of an organic resin binder, and about 0.001% to about 20% of an adhesion modifier which induces fiber pull-out when the shingle is torn and provides improved shingle tear strength; and a coating of asphalt or asphalt compound on both sides of the glass fiber mat.

10. A roofing shingle according to claim 9 wherein said amount of adhesion modifier is about 0.01% to about 10%.

11. A roofing shingle according to claim 9 wherein said adhesion modifier is a polysiloxane.

12. A roofing shingle according to claim 11 wherein said polysiloxane is a polyalkyl siloxane, a polyaryl siloxane, a polyalkylaryl siloxane or a polyether siloxane or derivative thereof.

13. A roofing shingle according to claim 11 wherein said polysiloxane is a polydimethyl siloxane or derivative thereof.

14. A roofing shingle according to claim 11 wherein said polysiloxane has a molecular weight > 600.

15. A roofing shingle according to claim 9 wherein said organic resin binder includes a urea-formaldehyde resin.

16. A roofing shingle according to claim 9 wherein said glass fibers have a length of about 3 mm to about 130 mm, and a diameter of about 5 micrometers to about 25 micrometers.

17. A roofing shingle comprising a glass fiber mat including, by weight, about 68% to 90% fibers, about 10% to about 32% of an organic resin binder, and about 0.001% to about 20% of an adhesion modifier which induces fiber pull-out when the shingle is torn and provides improved shingle tear strength, and a coating of asphalt or asphalt compound on both sides of the glass fiber mat;

said shingle characterized by a substantial number of "pull-out" fibers in the break area when tested in accordance with ASTM D-3462.

18. The roofing shingle of claim 17 wherein said adhesion modifier is selected from the group consisting of siloxanes, glycerides, phosphate esters of fatty acids or alcohols, fatty ammonium salts, saponified oils, coconut oil, amines such as polyamines, fatty amines, fatty amine oxides, amido amines, polyamido amines, amine substituted terpenes, polyamides and mixtures of the above with glycerols or glycols.

19. The roofing shingle of claim 17 wherein said adhesion modifier is a polysiloxane.

20. The roofing shingle of claim 17 wherein said organic resin is a urea-formaldehyde resin.

21. The roofing shingle according to claim 17 wherein said glass fibers have a length of about 3 mm to about 130 mm, and a diameter of about 5 micrometers to about 25 micrometers.

22. In a process for the preparation of a glass fiber mat for use in a roofing composite comprising: (a) dispersing fibers in an aqueous medium containing a dispersing agent to obtain a slurry, (b) draining the slurry on a mat forming machine to obtain a wet fiber web, (c) transferring the wet fiber web to a first carrier fabric, (d) applying a binder solution onto the wet fiber web on said first carrier, (e) removing the excess binder from the wet fiber web, (f) transferring the wet fiber web binder onto a second carrier, and (g) drying/curing the wet fiber web; the improvement which is characterized by applying an adhesion modifier to the fiber mat at any stage in the process after forming the wet fiber web, wherein said adhesion modifier induces fiber pull-out when the composite is torn and provides improved composite tear strength.

23. The process of claim 22 wherein said glass fiber mat comprises, by weight, about 68% to about 90% of fibers; about 10% to about 32% of an organic resin binder; and about 0.001% to about 20% of an adhesion modifier.

24. A process according to claim 23 wherein said adhesion modifier is a polysiloxane selected from the group consisting of a polyalkyl siloxane, a polyaryl siloxane, a polyalkylaryl siloxane, a polyether siloxane or a derivative thereof.

25. A process according to claim 24 wherein the amount of said polysiloxane is about 0.01% to about 10%.

26. A process according to claim 24 wherein said polysiloxane has a molecular weight > 600.

27. A process according to claim 24 wherein said polysiloxane is a polydimethyl siloxane or derivative thereof.

28. A process according to claim 24 wherein polysiloxane is applied as a solution or emulsion.

29. A process according to claim 24 wherein said polysiloxane is applied before step (g).

30. A process according to claim 24 wherein said polysiloxane is applied after (e) and before (g).

31. A process according to claim 24 wherein said polysiloxane is applied as an emulsion.

32. In a process for the preparation of a glass fiber mat for use in a roofing composite comprising: (a) dispersing fibers in an aqueous medium containing a dispersing agent to obtain a slurry, (b) draining the slurry on a mat forming machine to obtain a wet fiber web, (c) transferring the wet fiber web to a first carrier fabric, (d) applying a binder solution onto the wet fiber web on said first carrier, (e) removing the excess binder from the wet fiber web, (f) transferring the wet fiber web binder onto a second carrier, and (g) drying/curing the wet fiber web; the improvement which is characterized by applying an adhesion modifier to the fibers prior to forming the wet fiber web, wherein said adhesion modifier induces fiber pull-out when the composite is torn and provides improved composite tear strength.

33. A composite roofing product comprising a glass fiber mat comprising, by weight, about 68% to about 90% of fibers; about 10% to about 32% of an organic resin binder; and about 0.001% to about 20% of an adhesion modifier; and a coating of asphalt or asphalt compound on at least one side of said glass fiber mat; said product characterized by a substantial number of pull out fibers in the break area when torn, and wherein said adhesion modifier induces fiber pull-out during tear of the composite and provides improved composite tear strength.